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Appellant: Eric T. Bovell

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For: FRONT PANEL SERVING AS EXTRACTION LEVER FOR CIRCUIT  
SLED MOUNT

#13/ Appeal  
Brief  
R. Tyson  
10/21/03

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BRIEF ON APPEAL

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Sir:

This Brief on Appeal is submitted pursuant to the Notice of Appeal filed with the U.S. Patent and Trademark Office on July 7, 2003, and in support of the appeal from the final rejection set forth in the Office Action mailed on April 7, 2004. The fee for filing a brief in support of an appeal is enclosed.

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### REAL PARTY IN INTEREST

The real party in interest is Netezza Corporation of Framingham, Massachusetts. Netezza Corporation is the Assignee of the entire right, title and interest in the subject application, by virtue of an Assignment recorded on February 28, 2002 at Reel 012669, Frames 0421-0423.

### RELATED APPEALS AND INTERFERENCES

Appellant, the undersigned Attorney, and the Assignee are not aware of any related appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### STATUS OF CLAIMS

Claims 2, 3, and 6 through 15 have been finally rejected, and a copy appears in the Appendix of this Brief. Claims 2, 3, and 6 through 15 were amended in the Amendment filed on February 24, 2003. Claims 1, 4 and 5 were canceled.

### STATUS OF AMENDMENTS

All prior amendments have been entered in the application.

### SUMMARY OF INVENTION

The present invention relates to enclosures for electronic equipment and more specifically to a circuit board module that provides grounding tabs attached to a front panel that also serves as an extraction lever.

Typically, a mounting tray may contain an array of circuit board module or "sleds" for electronic components such as Hard Disk Drives (HDDs). A circuit sled module has a chassis to which the HDD is mounted, the HDD, a circuit board, and a front panel. The ends of such a circuit sled module generally contain electrical signal connectors which mate with corresponding connectors mounted at the end of the tray. Because individual modules can be added and removed from the tray, the modules need surfaces to provide proper grounding, particularly where the front panel of the modules also serve as a rotatable extraction lever and may not have any direct electrical contact with the chassis tray.

Appellant solves this problem by using a circuit sled module that has a front panel which also serves as an extraction lever. The front panel is thus rotatably mountable to the module. The front panels also contain grounding tabs. As explained in the specification, the grounding tabs, preferably located on both sidewalls of the front panel extraction lever, are used for electrically grounding a given front panel to the adjacent front panels of other circuit sled modules when inserted into the tray. As a panel either engages or disengages a circuit sled module, the attached grounding tabs thus also automatically engage or disengage contact with another grounding contact.

Thus, despite the fact that the front panels must serve as moveable extraction levers once inserted into the tray, the panels also provide an electrically continuous surface, and therefore an electromagnetically enclosed structure.

The claimed invention is exemplified by independent Claim 10. For convenience, that claim is reproduced here.

10. A circuit sled module comprising:
  - a panel having a front, top, and bottom side, the panel being rotatably connected to the circuit sled module;
  - at least one hook near the bottom of the panel engaging a catch of a tray when the panel is rotated into a closed position; and
  - the panel further comprising electrically conductive grounding tabs for electrically connecting the panel to an adjacent panel.

### ISSUES

The claimed invention requires a front panel rotatably connected to a circuit sled module for installation in a tray, wherein the front panel also possesses electrically conductive grounding tabs for connecting the panel to an adjacent panel. The cited Varghese reference discusses grounding tabs permanently installed within a circuit board enclosure frame wherein the tabs are designed so that no end edge is exposed to interfere with components.

The two issues on appeal are:

(1) Has the Examiner set forth a prima facie case of obviousness, given that Varghese only teaches grounding clips on a fixed chassis?

(2) Even if Varghese teaches grounding clips used on other parts in a circuit enclosure, does the prior art suggest combining grounding tabs with a panel that is rotatably connected to a circuit module?

### GROUPING OF CLAIMS

Claim 10 and claims 2, 3, 6-9 and 11 stand or fall together, since they all depend from claim 10. Although claims 12-15 are independent claims, they recite language similar to claim 10. Since no further argument is presented herein for these other claims, they too will stand or fall with claim 10.

### ARGUMENT

Claims 2, 3 and 6-15 were rejected under 35 U.S.C. § 103(a), with the Examiner being of the opinion that the claims were obvious over Reznikov et al., U.S. Patent No. 6,378,965B1 ("Reznikov") in view of Varghese et al., U.S. Patent No. 5,896, 273 ("Varghese").

A. Varghese Does Not Disclose Grounding Tabs On A Moveable Front Panel

To establish a prima facie case for obviousness under 35 U.S.C. § 103(a), the Examiner must not only demonstrate that every claim limitation is taught or suggested by the cited references, but also that a motivation to combine such references is suggested by the prior art. See In re Fine 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner may not resort to speculation, unfounded assumption, or hindsight reconstruction in the factual basis for rejection. See In re GPAC, Inc., 57 F.3d 1573, 1582 (Fed. Cir. 1995) (finding rejection by Board of Patent Appeals under § 103 as “conclusory” and “lack[ing] the factual basis required”).

The Examiner was of the opinion that since Reznikov discloses a handle (66, Fig. 5 of Reznikov) that can be used as an extraction level for a panel, and since Varghese et al. discloses a module having a grounding tab (102, Figs. 2 and 3a - 3B of Varghese), that the Appellant’s invention would be obvious. We must respectfully disagree with this conclusion.

Appellant does agree with the Examiner that Reznikov discloses a panel that is usable as an extraction lever for a circuit module.

In addition, we agree that Varghese discloses a chassis having at least one grounding tab (i.e., item 102 as shown in his Figures 2 and 3A-3B).

However, the Examiner has read features into Varghese that simply are not there. Specifically, the Examiner concludes that Varghese “attaches grounding tabs to the front panel of a circuit sled module.” However, in Varghese, the grounding tabs are an integral, fixed part of the chassis itself (Varghese, Figs. 2, 3a).

Careful consideration of Varghese’s Fig. 3A clearly shows the clip 100 being held by a finger section 102 to portions of the frame 12. There is no suggestion by Varghese that the clips 100 can be mounted on his front panel 16 (Fig. 1), or that clips 100 can be mounted on the mounting head 46 (Fig. 2). The elements 44 on the edge of the mounting head 46 are described as “threaded fasteners.” Clearly, these threadable fasteners are not fastening a panel to an adjacent panel. Furthermore, a threaded fastener would defeat Appellant’s indicated purpose of providing a convenient grounding mechanism for pivotable panels. Thus, Varghese does not

provide for grounding clips attached to a moveable front panel, particularly where that front panel also serves as an extraction lever as well.

The focus in Varghese is placed on the design also of the grounding clip itself, rather than the clip's location. (Col. 5, 47-50). For example, Varghese shows a clip 100 designed such that it has no exposed edge ends to interfere with or snag against components. The primary concern in Varghese was thus not on the placement of the grounding clip in relation to any moving parts, but in designing a clip "so that no end edge is exposed in such a way as to interfere with, or snag on other components while providing effective EMI reduction." (Col. 5, 47-50).

Therefore, Appellant respectfully submits that the Examiner has failed to make out a prima facie case.

B. The Prior Art Does Not Provide Any Motivation to Combine

Additionally, the Examiner has improperly concluded that a skilled artisan desiring to provide grounding between the modules of Reznikov would have been motivated to apply grounding clips of Varghese to the rotatable front panels thereof. This conclusion was clearly reached in hindsight, only after having read the Applicant's claims, since the prior art does not suggest the desirability of such a modification. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination in the prior art itself. See Ex parte Metcalf, 67 U.S.P.Q.2d 1633, 1635 (2003) (finding that the Examiner improperly combined two prior art references without providing some teaching, suggestion, or incentive supporting the proposed combination).

Varghese only teaches circuit boards having a fixed front face and does not teach or show extraction levers at all. He therefore certainly does not teach or suggest extraction levers having grounding tabs or that grounding tabs could be fitted with or to such an extraction lever.

While Reznikov discloses a panel that is usable as an extraction lever for a circuit module, he does not provide any suggestion for placing grounding tabs on the extraction lever.

In fact, Reznikov does not recognize the desirability of providing a ground path between adjacent front panels at all.

It is insufficient to simply find various bits and pieces of a structure from different prior art references and make a bald statement that it would be obvious to combine them. The fact that an invention is a combination of features used in two separate prior art devices is not alone fatal to patentability. There must be something in the prior art to suggest the desirability of making the combination. In re Geiger, 815 F.2d 686, 2 U.S.P.Q.2d 1276 (Fed. Cir. 1987). Only the Applicant has recognized a problem in how to provide a grounded surface for the front panels which are not only themselves movable, but also which do not necessarily contact a portion of the chassis. Neither Varghese nor Reznikov describe how to provide grounding for moveable front panels that also serve as extraction levers. Indeed, it is only the Applicant who teaches one to solve this problem by inserting clips on the extraction panels themselves. The problem confronted by the inventor must be considered in determining whether it would have been obvious to combine prior art references to solve that problem. Northern Telecom v. Datapoint Corp., 908 F.2d 831, 15 U.S.P.Q. 2d 132 (Fed. Cir. 1990).

Therefore, the rejection of Claims 2, 3, and 6-15 under 35 U.S.C. § 103(a) cannot stand.



CONCLUSION

Appellant respectfully submits that all the remaining claims in the application are in condition for allowance. The cited references fail to suggest all claim limitations as required for a rejection under 35 U.S.C. § 103(a). Furthermore, the cited references fail to provide any suggestion or motivation to support a combination.

The grounds for rejection under 35 U.S.C. § 103(a) should be reversed.

Respectfully submitted,

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APPENDIX

2. The module of claim 10 further comprising a fastener releasably locking the panel to the circuit sled module.
3. The module of claim 10 wherein the fastener is a screw attached to the panel.
6. The module of claim 10 wherein the panel serves as a lever for extracting the circuit sled module from the tray when the panel is in an open position.
7. The module of claim 10 further comprising at least one side wall having at least one hook extending from a portion of the side wall near the bottom of the panel.
8. The module of claim 10 wherein the circuit sled module comprises a hard disk drive.
9. The module of claim 10 further comprising vents in the front of the panel.
10. A circuit sled module comprising:
  - a panel having a front, top, and a bottom side, the panel being rotatably connected to the circuit sled module;
  - at least one hook near the bottom of the panel engaging a catch of a tray when the panel is rotated into a closed position; and
  - the panel further comprising electrically conductive grounding tabs for electrically connecting the panel to an adjacent panel.
11. The module of claim 10 wherein when the panel is rotated away from the circuit sled module the bottom of the panel engages an outer surface of the catch and provides a force which disengages mating connectors.

12. A circuit sled module comprising:
- a panel having a front, top, and a bottom, the panel being rotatably connected to the circuit sled module;
  - at least one hook near the bottom of the panel engaging a catch of a tray when the panel is in a closed position;
  - wherein the panel serves as a lever for extracting the circuit sled module from the tray when the panel is in an open position; and
  - wherein the panel further comprises electrically conductive grounding tabs for electrically connecting the panel to an adjacent panel.
13. A circuit sled module comprising:
- a panel having a front, top, bottom, and a left side wall and right side wall extending from the front;
  - holes in the side walls near the top of the panel, said holes receiving an axle connected to the circuit sled module, the panel rotating about an axis formed by the axle;
  - at least one hook near the top of the panel engaging a catch of a tray when the panel is in a closed position; and
  - the panel further comprises electrically conductive grounding tabs for electrically connecting the panel to an adjacent panel.
14. A method for extracting a circuit sled module from a tray comprising:
- providing a circuit sled module having a front panel comprising a front, top, and a bottom, the panel being rotatably connected to the circuit sled module the panel having grounding tabs formed thereon;
  - rotating the front panel away from the circuit sled module until the bottom portion of the front panel engages a lip of a tray forcing the circuit sled module to be released from the tray; and
  - pulling on the front panel to extract the circuit sled module from the tray, and thus causing the grounding tabs to engage grounding tabs of an adjacent module.

15. A method for inserting a circuit sled module into a tray comprising:
  - providing a circuit sled module having a front panel comprising a front, top, bottom, and at least one hook near the bottom of the panel engaging a catch of a tray when the panel is in a closed position, the panel being rotatably connected to the circuit sled module and having grounding tabs formed thereon;
  - inserting the circuit sled module into the tray; and
  - rotating the front panel toward the closed position until the at least one hook engages the catch of the tray, and thus causing the grounding tabs to engage grounding tabs of an adjacent module.